

IN THE CLAIMS

The status of the claims is listed below.

Claims 1-42: (Canceled).

43. (New) A mammalian non-human female animal having a complete depletion of ovarian primordial follicles and at least one characteristic selected from the group consisting of depletion of ovarian follicles, irregular ovarian cyclicity, cessation of estrous cyclicity, elevated FSH levels, erratic ovarian  $17\beta$ -estradiol levels, loss of bone mineral density, and reduced ovarian weight, wherein the animal has been administered 4-vinylcyclohexene diepoxide at a dosage of at least 100 mg/kg/day.

44. (New) The animal of Claim 43, wherein the animal has been administered 4-vinylcyclohexene diepoxide at a dosage of at least 100 mg/kg/day for at least 10 days.

45. (New) The animal of Claim 43, which is suitable as a model of menopause.

46. (New) The animal of Claim 43, which is suitable as a model of perimenopause.

47. (New) The animal of Claim 43, which has irregular ovarian cyclicity.

48. (New) The animal of Claim 43, which has cessation of estrous cyclicity.

49. (New) The animal of Claim 43, which has elevated FSH levels.

50. (New) The animal of Claim 43, which has erratic ovarian  $17\beta$ -estradiol levels.
51. (New) The animal of Claim 43, which has loss of bone mineral density.
52. (New) The animal of Claim 43, which has reduced ovarian weight.
53. (New) The animal of Claim 43, which is a mouse.
54. (New) The animal of Claim 43, which is a rat.
55. (New) The animal of Claim 43, which is a primate.
56. (New) The animal of Claim 43, which is a canine.
57. (New) A method of preparing the animal of Claim 43, comprising administering to the animal 4-vinylcyclohexene diepoxide at a dosage of at least 100 mg/kg/day.
58. (New) The method of Claim 57, wherein the 4-vinylcyclohexene diepoxide is administered intraperitoneally (i.p.), subcutaneously (s.c.), or by an implantable device.
59. (New) The method of Claim 57, wherein the 4-vinylcyclohexene diepoxide is administered to the animal for at least 10 days.

60. (New) A method of inducing ovarian failure in a mammalian non-human female animal other than a mouse or a rat, comprising administering to the animal 4-vinylcyclohexene diepoxide at a dosage of at least 100 mg/kg/day.

61. (New) The method of Claim 60, wherein the animal is a canine.

62. (New) The method of Claim 60, wherein the animal has been administered 4-vinylcyclohexene diepoxide at a dosage of at least 100 mg/kg/day.

63. (New) The method of Claim 60, wherein the animal has been administered 4-vinylcyclohexene diepoxide at a dosage of at least 100 mg/kg/day for at least 10 days.

64. (New) The method of Claim 60, wherein the animal is selected from the group consisting of cats, hamsters, ferrets, rabbits, sheep, cattle, horses, pigs, deer, elk, moose, bears, goats, monkeys, and wild felines.

65. (New) A method of controlling the size of a mammalian non-human animal population, comprising administering 4-vinylcyclohexene diepoxide at a dosage of at least 100 mg/kg/day to cause at least partial ovarian failure in at least a portion of the female members of the animal population.

66. (New) The method of Claim 65, wherein the animal is selected from the group consisting of dogs, cats, hamsters, ferrets, rabbits, sheep, cattle, horses, pigs, deer, elk, moose, bears, goats, monkeys, and wild felines.

67. (New) The method of Claim 65, wherein the animal has been administered 4-vinylcyclohexene diepoxide at a dosage of at least 100 mg/kg/day.

68. (New) The method of Claim 65, wherein the animal has been administered 4-vinylcyclohexene diepoxide at a dosage of at least 100 mg/kg/day for at least 10 days.